

Notice of Allowability

Application No.

09/759,600

Examiner

Stephen M. D'Agosta

Applicant(s)

BERLINER ET AL.

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment received 8-30-04.
2. ☒ The allowed claim(s) is/are 1,3-5,10-15 and 18-26.
3. ☒ The drawings filed on 16 January 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Response to Arguments

The applicant's amendment dated 8-30-04 overcomes the examiner's prior art rejection. **Claims 1, 3-5, 10-15, 18-26 allowed.**

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:

1. The independent claims recite highly specific designs which, in the examiner's opinion, do not read on the prior art of record and are therefore novel.

A wireless transmission system comprising a first wireless device including: a first receiver that receives a plurality of forward path radio frequency (RF) signals comprising plurality of different carrier frequencies modulated with a modulation signal, the different carrier frequencies having approximately the same multipath transmission characteristics between the first and second wireless devices, a demodulator for detecting the modulation signal in said plurality of forward path RF signals, a synthesizer for generating a plurality of reverse path RF signals from the modulation signal, and a first transmitter for transmitting said plurality of reverse path RF signals, wherein the reverse path RF signals are phase coherent with the at least one forward path RF signal; and a second wireless device including: a second transmitter that transmits the plurality of forward path RF signals received by said first receiver of the first wireless device, second receiver that receives the reverse path RF signals, a detector that generates amplitude and phase comparison data based on at least the received reverse path RF signal, and a controller/processor that generates transmission path data using the detected amplitude and phase data and the carrier frequencies and identifies from the transmission path data time delay information for RF signals traveling in a direct path between the first and second wireless device, whereby error introduced by RF signals traveling in an indirect path is reduced or eliminated, and wherein said synthesizer generates said plurality of reverse path RF signals from the plurality of forward path RF signals and each of said plurality of reverse path RF signals is phase coherent with a corresponding one of said plurality of forward path RF signals.

The underlined portion shows newly amended limitations that make the claim novel – eg. the addition of the synthesizer used to generate the multiple reverse-path RF signals from the many forward-path RF signals and each of said many reverse-path RF

signals is phase coherent with a corresponding one of said plurality of forward path RF signals – is novel when taken as a whole.

2. Independent claims 14 and 25-26 disclose a similar recitation as that of claim 1 but regard a wireless communication device.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 703-306-5426. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen D'Agosta
9-30-04


WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600